Cont'd B7

16. (Amended) [A] The surface inspection method described in claim 6, [characterized in that the] wherein said light quantity of said received light is converted [on the basis of] based upon a light quantity detected when a standard sample is used as [said] the object to be measured.

REMARKS

Favorable reconsideration of this application, as presently amended and in light of the following discussion, is respectfully requested.

Claims 1 and 3-16 remain pending in this application, claim 2 having been canceled, without prejudice or disclaimer, by the present amendment and claims 1 and 3-16 having been amended for clarity by the present amendment.

In the outstanding Office Action, the specification was objected to as being unclear as to what the claimed invention is, claims 10 and 12 were rejected under 35 U.S.C. § 112, first paragraph, as not being enabled, claim 10 was rejected under 35 U.S.C. § 112, second paragraph, as being indefinite, claims 1, 5, and 11 were rejected under 35 U.S.C. § 102(b) as being anticipated by Nakazawa et al., and claims 1-9, 11, and 13-16 have been rejected under 35 U.S.C. §103(a) as being unpatentable over Shiraishi.

In response to the objection to the specification, Applicants respectfully submit that the specification describes some of the components of the polarizing microscope of the present invention on page 17, lines 2-13 and then continues to describe those components, especially the objective lens 12, light source 11, collimate lens 22, and bright/dark-field switchover slide 14, in further detail. Even though the specification does not mention a polarizer or an analyzer as suggested by the Office Action on page 2, paragraph no. 2, Applicants respectfully submit that one of ordinary skill in the art would know and understand the use of the term "polarizing microscope" because polarizing microscopes are

old and well known in the art. Also, the polarizing microscope itself is not being claimed and the term "polarizing microscope" does not go to the merits of the present invention. Based upon the foregoing, Applicants respectfully request withdrawal of the objection to the specification.

In response to the rejection of claims 10 and 12 under 35 U.S.C. § 112, first paragraph, as not being enabled, Applicants have amended claims 10 and 12 for clarity. Furthermore, Applicant respectfully submit that the specification adequately discloses the use of optical fiber on page 6, line 26 to page 7, line 14 and page 34, line 9, to page 37, line 1. Applicants respectfully submit that the amendments to claims 10 and 12 do not add any new matter and that support for the amendments to claims 10 and 12 can be found in the originally filed specification, claims, and drawing figures. Based on the foregoing, Applicants request entry and consideration of the amendments to claims 10 and 12 and withdrawal of the rejection of claims 10 and 12 under 35 U.S.C. § 112, first paragraph, as not being enabled.

In response to the rejection of claim 10 under 35 U.S.C. § 112, second paragraph, as being indefinite, Applicants have amended claim 10 to change the dependency to claim 9 so that "said tubular member" now has antecedent basis. Applicants respectfully submit that the amendment to claim 10 does not add any new matter and that support for the amendment to claim 10 can be found in the originally filed specification, claims, and drawing figures. Based on the foregoing, Applicants request entry and consideration of the amendment to claim 10 and withdrawal of the rejection of claim 10 under 35 U.S.C. § 112, second paragraph, as being indefinite.

In response to the rejection of claims 1, 5, and 11 under 35 U.S.C. § 102(b) as being anticipated by Nakazawa et al., Applicants have amended claims 1, 5, and 11 for clarity.

More particularly, independent claims 1, 5, and 11 have been amended to recite an illumination switchover means.

Nakazawa et al. disclose an apparatus for photoelectrically detecting the position of each of the edges of a line having the opposite edges thereof formed substantially parallel to each other on a substrate to measure the width of the line. The apparatus includes a source of coherent light, means for condensing the coherent light into a tiny light spot which illuminates the line, means for imparting to the tiny light spot a minute oscillation having an amplitude less than the width of the line, means for providing relative movement of the tiny light spot and the line so that diffracted light may be created at each of the edges of the line, a first photoelectric conversion element for receiving chiefly the diffracted light created at one of the edges of the line, a second photoelectric conversion element for receiving chiefly the diffracted light created at the other edge of the line, and a circuit for producing position signals corresponding to the edges of the line from the output signals from the first and second photoelectric conversion elements.

Nakazawa et al. fail to teach or suggest, as is now recited in amended independent apparatus claim 1, an illumination switchover means, Figure 1 of Nakazawa et al. showing only a half-mirror 3 which cannot switch illumination from bright to dark field as can the present invention. Futhermore, Nakazawa et al. fail to teach or suggest, as is now recited in amended independent method claims 5 and 11, the step of switching over an illumination switchover means.

Applicants respectfully submit that the amendments to claims 1, 5, and 11 do not add any new matter and that support for the amendments to claims 1, 5, and 11 can be found in the originally filed specification, claims, and drawing figures. Based on the foregoing, Applicants request entry and consideration of the amendments to claims 1, 5, and 11 and

withdrawal of the rejection of claims 1, 5, and 11 under 35 U.S.C. § 102(b) as not being anticipated by Nakazawa et al.

In response to the rejection of claims 1-9, 11, and 13-16 under 35 U.S.C. §103(a) as being unpatentable over Shiraishi, Applicants have amended independent claims 1, 5, 9, 11, and 12 for clarity. More particularly, independent apparatus claims 1 and 9 have been amended to recite an illumination switchover means for switching from bright-field illumination, using a half-mirror portion, in which said light from said light source is made parallel with said optical axis of said objective lens and applied to the object to be measured through said objective lens, to dark-field illumination, in which said light from said light source is made ringlike and applied obliquely with respect to said optical axis of said objective lens such that there is a focus on the surface of the object to be measured. Furthermore, independent method claims have been amended to recite the step of switching over an illumination switchover means from bright-field illumination, using a half-mirror portion, in which said light from said light source is made parallel with said optical axis of said objective lens and applied to the object to be measured through said objective lens, to dark-field illumination, in which said light from said light source is made ringlike and applied obliquely with respect to said optical axis of said objective lens such that there is a focus on the surface of the object to be measured.

Shiraishi discloses illuminating light at a pupil plane of an illumination optical system for illuminating a position detection mark on a substrate. The illuminating light is limited to an annular area centered at an optical axis, and a member substantially blocks an image-forming light beam distributed over an area on a pupil plane of an image-forming optical system for forming an image of the position detection mark on an imaging device by receiving light generated from the mark. The area is in image-forming relation to the annular

area on the pupil plane of the illumination optical system. Alternatively, a member gives a phase difference of approximately $\pi/2$ (rad) between the image-forming light beam distributed over the area which is in image-forming relation to the annular area on the pupil plane of the illumination optical system and the image-forming light beam distributed over the area other than that area.

Shiraishi fails to teach or suggest, as is now claims in independent apparatus claims 1 and 9, an illumination switchover means for switching from bright-field illumination, using a half-mirror portion, in which said light from said light source is made parallel with said optical axis of said objective lens and applied to the object to be measured through said objective lens, to dark-field illumination, in which said light from said light source is made ringlike and applied obliquely with respect to said optical axis of said objective lens such that there is a focus on the surface of the object to be measured. Shiraishi fails to teach or suggest, as is now claims in independent method claims 5, 11, and 12, a step of switching over an illumination switchover means from bright-field illumination, using a half-mirror portion, in which said light from said light source is made parallel with said optical axis of said objective lens and applied to the object to be measured through said objective lens, to dark-field illumination, in which said light from said light source is made ringlike and applied obliquely with respect to said optical axis of said objective lens such that there is a focus on the surface of the object to be measured.

Applicants respectfully submit that the amendments to claims 1-9, 11, and 13-16 do not add any new matter and that support for the amendments to claims 1-9, 11, and 13-16 can be found in the originally filed specification, claims, and drawing figures. Applicants also respectfully submit that amended dependent claims 2-4 and 12-15, amended dependent claims 6-8 and 16, and amended independent claim 10 are either directly or indirectly

dependent upon amended independent claim 1, amended independent claim 5, and amended independent claim 9, respectively, so that arguments serving to patentably distinguish amended independent claim 1, amended independent claim 5, and amended independent claim 9 from the prior art of record are available, among others, to patentably distinguish amended dependent claims 2-4 and 12-15, amended dependent claims 6-8 and 16, and amended dependent claim 10, respectively. Based on the foregoing, Applicants respectfully request entry and consideration of the amendments to claims 1-9, 11, and 13-16, withdrawal of the rejection of claims 1-9, 11, and 13-16 under 35 U.S.C. § 103(a) as being unpatentable over Shiraishi, and allowance of amended claims 1-16.

In view of the present amendment, claims 1-16 are believed to be in condition for allowance, and an early and favorable action to that effect is respectfully requested.

Respectfully submitted,

OBLON, SPIVAK, McCLELLAND,
MAIER & NEUSTADT, P.C.

Gay Ann Spahn

Gregory J. Maier
Registration No. 25,599
Attorney of Record
Gay Ann Spahn
Registration No. 34,978

22850
Tel: (703) 413-3000
Fax: (703) 413-2220
I:\atty\gas\Client 2421\Matter 0331\Amdt.wpd